Nolan Carnahan

Irvine, CA
ncarnahan1@gmail.com
ncarnahan.github.io/portfolio

Summary

Software developer experienced with gameplay and engine programming. Practical knowledge of real-time computer graphics, artificial intelligence, scripting languages, and virtual reality.

Skills

Languages: C, C++, C#, Java, Lua, JavaScript, GLSL
Libraries: OpenGL, .NET
Development Tools: Microsoft Visual Studio, Unity, Git
Art Software: Blender, GIMP, Photoshop Elements
Audio Production: FL Studio, Reaper

Experience

Contract Web Developer   April 2015 — July 2015
Easy Moving   Bruce Township, MI

Developed a PHP web application for self-scheduling household moving jobs. Deployed application and configured TLS certificate. Integrated automatic payment handling using PayPal.

Engineering Co-op Student   July 2011 — March 2015
Stanley Engineered Fastening   Troy, MI

Total of 24 months work experience. Improved existing desktop testing software, embedded touchpad software, and automated PDFs.

Thesis Project: Independently developed a C#/ASP.NET MVC web application for testing and verifying welding and riveting controls. Implemented a ModbusTCP networking library according to the specification. Integrated Lua scripting for automated testing.

Projects

Portfolio projects can be viewed at: https://ncarnahan.github.io/portfolio

Rendering Engine (Independent Study)

Written in C++ using OpenGL. Supports Blinn-Phong shading, normal mapping, tangent generation, draw call sorting, shadow mapping, and deferred shading.

Rift Racing (Independent Study)

Virtual reality racing game created in Unity. Developed interfaces for both virtual reality and traditional screens.

Riftenstein (Independent Study)

Virtual reality first-person shooter created in Unity. Implemented multiple control schemes to compare their suitability for virtual reality.

Edge of No World (Personal Project)

Short platform game written in C++. Implemented asset processing pipeline. Integrated Lua scripting. Designed custom graph format for A* pathfinding.

Education

Bachelors of Science in Computer Science   July 2011 — June 2015
Kettering University   Flint, MI

References available upon request.